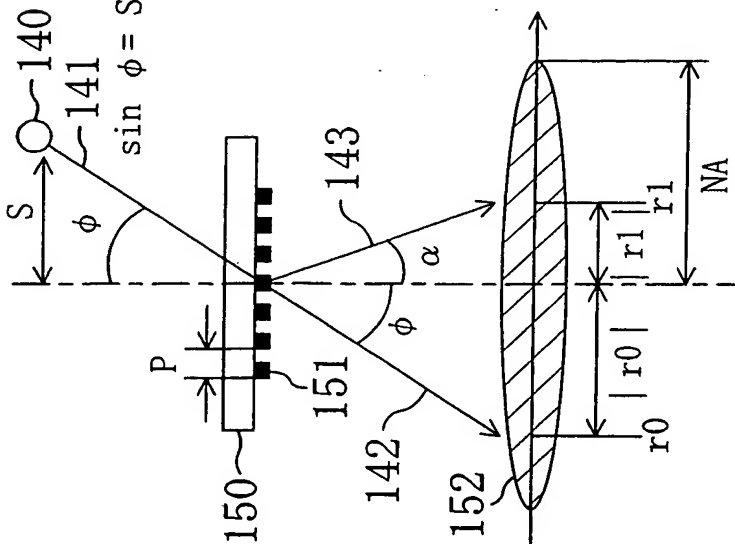




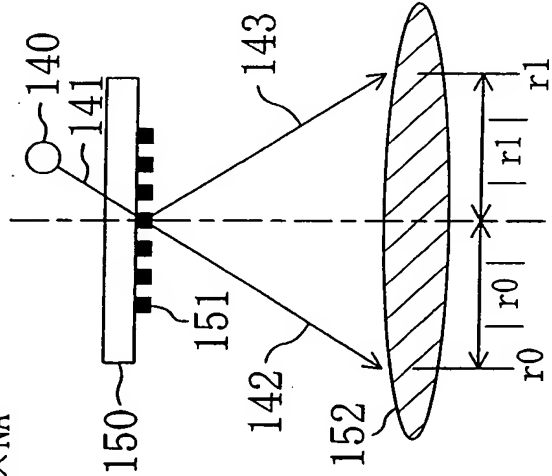
FIG. 5A



define

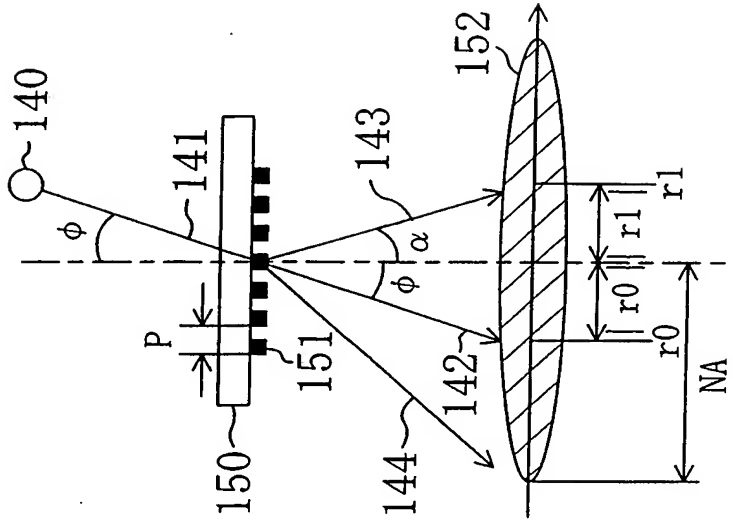
$$\begin{aligned} \sin \phi &= |r0|, \\ \sin \alpha &= |r1|, \\ |r0| + |r1| &= \lambda/P \text{ and} \\ \sin \theta_1 &= |r0| + |r1| \end{aligned}$$

FIG. 5B



If  $r0 = -r1$ , focused 0th-order diffraction light and focused first-order diffraction light are in the identical phase even in a defocus state.

FIG. 5C



When both +first-order diffraction light and -first-order diffraction light pass through a mask, a good defocus state cannot be obtained.

define

$$\begin{aligned} \sin \phi &= |r0|, \\ \sin \alpha &= |r1|, \\ |r0| + |r1| &= \lambda/P \text{ and} \\ \sin \theta_1 &= |r0| + |r1| \end{aligned}$$

FIG. 6A

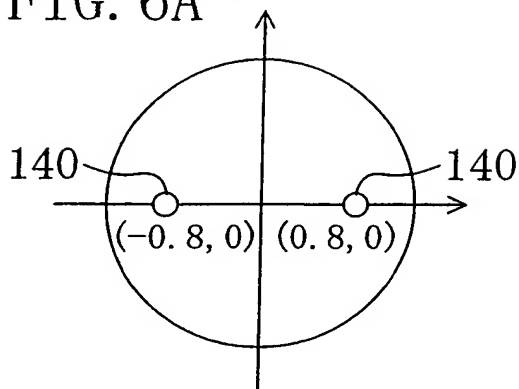


FIG. 6B

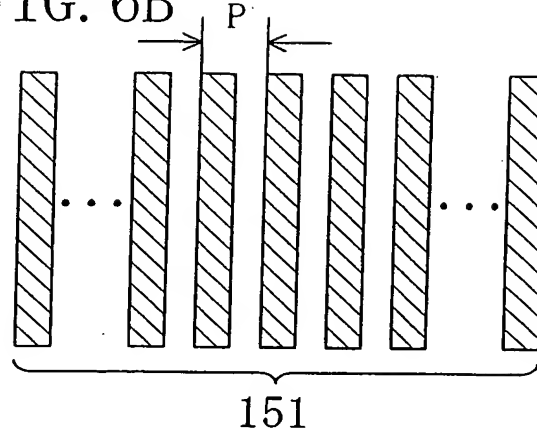


FIG. 6C

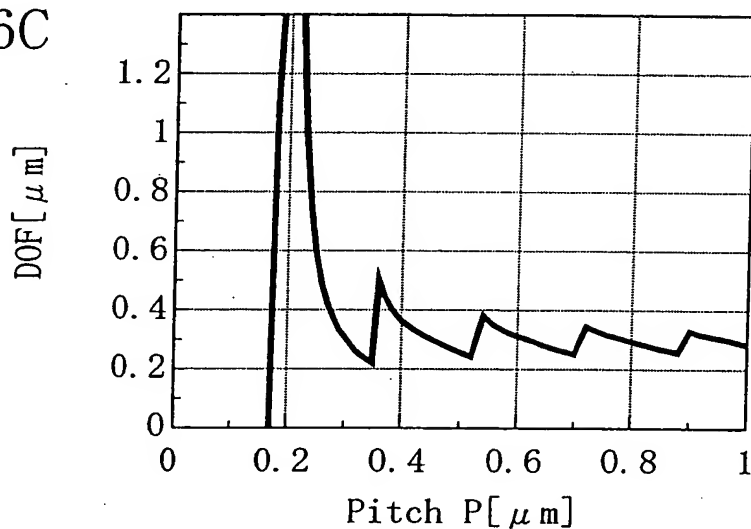


FIG. 6D

